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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/062,651

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Naoaki Komiya

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7590

02/07/2005

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EXAMINER

NGUYEN, KEVIN M

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/062,651

Applicant(s)

KOMIYA, NAOAKI

Examiner

Kevin M. Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 14, 2004 has been entered. An action on the RCE follows:

2. Claims 4 and 5 are cancelled, claims 1-3 and 6-8 are amended, and claims 1-3 and 6-8 are currently pending in the application. An action follows below:

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3 and 6-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S.

Patent No. 6,556,176. Although the conflicting claims are not identical, they are not

patentably distinct from each other because it would have been obvious to provide each of the electrical current of a different amount flowing to each of the OLED in accordance with the varied size of the corresponding driving transistor connected thereto over claims of the Friend's reference.

5. Claims 1-3 and 6-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of Okuyama et al (U.S. Patent No. 6,556,176) in view of Friend et al (US Patent No. 6,429,601).

6. As to claim 1, Okuyama et al teaches, recited in col. 6, lines 1-7 of claim 1, "outputting a different amount of electrical current, wherein a current signal corresponding to a total current amount from said n transistors is output a corresponding data lines and is supplied to said emissive element via said thin film transistor," recited in col. 6, lines 8-9 of claim 2 "each of said n transistors is of a different size," recited in col. 6, lines 10-11 of claim 3 "said emissive element is an organic electroluminescence element."

Okuyama et al teaches all of the claimed limitation of claim 1, except for a structure of one pixel comprising: a plurality of driving transistors, a plurality of scan thin film transistors, a plurality of data lines, a plurality of organic electroluminescent elements, and grayscales.

However, Friend et al teaches at least one pixel comprising a plurality of different size of driving transistors 15a-15d, a plurality of scan thin film transistors 13a-13d, a plurality of data lines 11a-11d, a plurality of organic electroluminescent elements 19a-19d, and 2ⁿ grayscale values for pixel (see fig. 5, col. 7, lines 58-65).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify each Okuyama's pixel including a plurality of different size of driving transistors 15a-15d, a plurality of scan thin film transistors 13a-13d, a plurality of data lines 11a-11d, a plurality of organic electroluminescent elements 19a-19d, and 2n grayscale values for pixel, in view of the Friend's reference because this would provide each cycle the high power mode more than one discrete high power pulse as taught by Friend et al (col. 2, lines 66-67).

7. As to claim 2, Friend et al teaches the transistors size of each of driving transistors correspond to the light-emitting areas are set so that the sizes are sequentially doubled (figure 3, column 7, lines 65-67).

8. As to claim 3, Friend et al teaches the size of the transistor is determined by the gate length and/or gate witch of the transistor (15a) associated with the light-emitting area (19a) (figure 3, column 7, lines 58-67).

9. As to claim 6, Friend et al teaches the driving period of the driving transistor of each pixel is divided into a plurality of sub-fields; and the duration of ON condition of each EL element is controlled by controlling the on/off condition in each sub-field (figures 7 and 8, column 8, lines 3-20).

10. As to claim 7, Friend et al teach the lengths of a plurality of sub-fields are set so that they are sequentially doubled (figure 8, column 8, lines 3-20).

11. As to claim 8, Friend et al teaches the light emitting areas could be defined as parallel strips running across the pixel, as in Fig. 3, or in other ways (col. 8, lines 1-2).

Conclusion


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 703-305-6209. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 703-308-6725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Nguyen
Patent Examiner
Art Unit 2674

KMN
February 1st, 2005


XIAO WU
PRIMARY EXAMINER